ABSTRACT OF THE DISCLOSURE

The invention includes a method of enhancing the chloride ion transport function of a mutant CFTR polypeptide in epithelial cells in a mammal. In a preferred embodiment, the mammal is a human patient afflicted with cystic fibrosis (CF). Specifically, the method comprises administering to a patient a therapeutically effective amount of a first compound to enhance trafficking of a mutant CFTR polypeptide to the surface of epithelial cells in the patient, and a therapeutically effective amount of a second compound to increase the chloride ion transport activity of a mutant CFTR polypeptide at the surface of epithelial cells, whereby, the chloride ion transport function of the mutant CFTR polypeptide is enhanced. The invention also includes a method of treating CF in a patient, wherein a mutant CFTR polypeptide is present in an epithelial cell in a patient with CF. Compositions for treating CF in a patient are also included, as well as kits for practicing the method of the invention.